## Manual of

Instructions for the Survey of the Public Lands of the United States

1973

Prepared by the BUREAU OF LAND MANAGEMENT TECHNICAL BULLETIN 6



UNITED STATES DEPARTMENT OF THE INTERIOR

## KEY TO CITATION OF AUTHORITIES, BY VOLUME AND PAGE OR SECTION

- Stat.—United States Statutes at Large.
- R.S.—Revised Statutes of the United States; citation includes section number.
- U.S.C.—United States Code (The Code of the Laws of the United States).
  - L.D.—Decisions of the Department of the Interior relating to the public lands through 1929, Vols. 1 to 52.
  - I.D.—Decisions of the Department of the Interior, 1930 and later, beginning with Vol. 53.
  - CFR—Code of Federal Regulations of the United States of America.

    Title 43—Public Lands: Interior.
  - U.S.—United States Reports. Decisions of the Supreme Court of the United States.
  - Fed.—Federal Reporter. Decisions of the United States Courts of Appeals.
  - F. 2d—Federal Reporter, second series.
    - Section numbers cited in this Manual without other designation indicate the chapter and chapter section of the Manual.

## Contents

	Page	
Chapter I.—The General Plan		Chapter VI.—Resurveys
The Manual	1	The nature of resurveys
The public lands	3	Jurisdiction
Laws relating to surveys	4	Limit of authority of surveyor
General rules	8	Bona fide rights of claimants
Organization	9	General field methods
The public land States	10	The dependent resurvey
•		The independent resurvey
Chapter II.—Methods of Survey		The independent resurvey
Distance measurement	13	Chapter VII.—Special Surveys and Instructions
Photogrammetry	15	Chapter vii.—Special Surveys and Instructions
The direction of lines	19	Special instructions
The geodesy of large-scale cadastral surveys	51	Special surveys
	01	Special surveys—water boundaries
Chapter III.—The System of Rectangular Survey	76	Swamp and overflowed lands
General scheme		Soil classification
	59	
Initial points	60	Chapter VIII.—Field Notes
Principal meridian	61	
Base line	62	Purpose and Style
Standard parallels	62	Titles
Guide meridians	62	Index
Township exteriors	63	Headings
Subdivision of townships	72	Abbreviations
Subdivision of sections	80	The detailed field-note record
Survey of parts of sections	88	Specimen field notes
Fractional townships	89	
Extension and completion surveys	90	Chapter IX.—Plats
Meandering	93	The importance of the plat
Limits of closure	98	Plat requirements
Marking lines between corners	99	Specimen township plat
Summary of objects to be noted, and sketches	101	Drafting the base drawing
·		Computation of areas
Chapter IV.—Monumentation		Inking the drawing
Legal significance of the monument	105	Tottoring
General requirements	105	Lettering
Corner material	106	Topography
Construction of monuments	106	Field sketch
Special-purpose monuments	107	Titles and subtitles
System of marking	109	Memorandum
Marks on corner monuments	109	Certificates
Marks on special-purpose monuments	121	Reproduction and distribution of plats
Corner accessories	122	Supplemental plats
Arrangement and marking of corner		Plats of mineral segregation surveys
accessories	125	Plats of fragmentary surveys
WOODNOTED TO THE PROPERTY OF T	TZÜ	Resurvey plats
Chapter V.—Restoration of Lost or Obliterated		
Corners		Chapter X.—Mineral Surveys
Identification of existent corners	129	Distinguishing features of the mineral survey
		Productioning regardles of the inflieral Survey
The restoration of lost corners	133	Requirements of field work

Page		Page
	Amended surveys	226
221	Plats	226
	Appendix I.—Adjustment of the Solar Unit	227
	Appendix II.—Sample Field Notes	239
	Index	325
	Inserts (Pocket, back cover)	
	No. 1: Specimen township plat	
	No. 2: Specimen plat, mineral-patent survey an	d mill
224	site	
	221 221 222 222 223 223 223 224	Amended surveys  Plats  221